ZIAUDDIN UNIVERSITY EXAMINATION BOARD

RESOURCES FOR

"SSC-I PHYSICS"

ZUEB EXAMINATIONS 2021

PREFACE:

The ZUEB examination board acknowledges the serious problems encountered by the schools and colleges in smooth execution of the teaching and learning processes due to sudden and prolonged school closures during the covid-19 spread. The board also recognizes the health, psychological and financial issues encountered by students due to the spread of covid-19.

Considering all these problems and issues the ZUEB Board has developed these resources based on the condensed syllabus 2021 to facilitate students in learning the content through quality resource materials.

The schools and students could download these materials from www.zueb.pk to prepare their students for the high quality and standardized ZUEB examinations 2021.

The materials consist of examination syllabus with specific students learning outcomes per topic, Multiple Choice Questions (MCQs) to assess different thinking levels, Constructed Response Questions (CRQs) with possible answers, Extended Response Questions (ERQs) with possible answers and learning materials.

ACADEMIC UNIT ZUEB:

1: Multiple Choice Questions:

The Multiple-Choice Questions with a stem, correct answer and 3 distractors or plausible wrong answers format is designed to assess the content and thinking of students from; R (Remembering); U(Understanding) and A (Applying, Analyzing, Evaluating, Creating). The questions are also classified into three difficulty levels accordingly; D (DIFFICULT), M (MODERATE), E (EASY)

HOW TO ATTEMPT AN MCQ:

MCQ:

- **EACH MCQ HAS FOUR OPTIONS, A, B, C AND D. SELECT ONE OPTION AS THE BEST ANSWER AND FILL IN THE CIRCLE OF THAT OPTION, FOLLOWING THE INSTRUCTIONS GIVEN BY THE INVIGILATOR.**
- **USE BLACK PEN/PENCIL TO FILL IN THE CIRCLE.**

S#	MCQ'S MATERIAL	KEY	CL	DL
1	A body is said to be in motion when it _____ its position with respect to its surroundings. **(A)** change **(B)** does not change **(C)** A and B **(D)** none of them	A	U/K	**M**
2	The numerical value of g is _____ m.s^{-2}. **(A)** 980 **(B)** 9.8 **(C)** 32 **(D)** 16	B	U/A/K	**E**
3	In S.l. units the value of g is **(A)** 9.8 m/s **(B)** 9.8 m/s^2 **(C)** 32 ft /s^2 **(D)** 980 m/s^2	B	U/A/K	**E**
4	The velocity and acceleration of a body moving with a uniform speed in a circle are **(A)** parallel **(B)** opposite **(C)** mutually perpendicular **(D)** none of them	C	U/K	**M**

5	If the velocity of a moving body decreases by equal amounts in equal intervals of time, however small they may be, the body is said to have _____ acceleration. **(A)** zero **(B)** uniform and positive **(C)** uniform and negative **(D)** none of them	C	U/A/K	**E**
6	By dividing the displacement of a moving body by the time taken we obtain _____ **(A)** average speed **(B)** average velocity **(C)** uniform velocity **(D)** acceleration	B	U/A/K	**E**
7	Speed in a given direction is called _____. **(A)** displacement **(B)** velocity **(C)** acceleration **(D)** momentum	B	U/K	**M**
9	If a moving body covers equal distances in equal intervals of time, however, small the interval may be, in a particular direction, then the velocity is called _____ velocity. **(A)** uniform **(B)** average **(C)** instantaneous **(D)** variable	A	U/A/K	**E**
10	The distance covered by a moving object in one second is called _____. **(A)** speed **(B)** velocity **(C)** acceleration **(D)** momentum	A	U/A/K	**E**
11	Motion cannot be produced in a body without _____. **(A)** agent **(B)** force **(C)** torque **(D)** both A and B	A	U/K	**M**
12	No moving object can be stopped without applying _____. **(A)** agent **(B)** force **(C)** torque **(D)** both A and B	B	U/A/K	**E**
13	The property of the matter by virtue of which it resists attempt to change its state of rest or of uniform motion is called _____. **(A)** inertia **(B)** mass **(C)** momentum **(D)** none of them	A	U/A/K	**E**
14	When an external force acts upon a body then it produces an _____ in the body in its own direction. **(A)** speed **(B)** velocity **(C)** acceleration **(D)** none of them	C	U/K	**M**
15	The acceleration produced in a body under the influence of an external force is _____ proportional to the magnitude of the force.	B	U/A/K	**E**

	(A)inversely (B)directly (C)Neitherdirectlynorinversely (D) none of them			
16	The quantity of matter in a body is called its _____. (A) inertia (B) mass (C) momentum (D) fluid	B	U/A/K	**E**
17	The force with which earth attracts a body towards its center is called _____ of the body. (A) gravity (B) weight (C) mass (D) none of them	B	U/K	**M**
18	Every action has a reaction, these are _____ in magnitude but _____ in direction. (A) equal, opposite (B) opposite, equal (C) not equal, opposite (D) equal, same	A	U/A/K	**E**
19	The product of mass and velocity is called _____. (A) work (B) momentum (C) power (D) none of them	B	U/A/K	**E**
20	The S.I unit of force is _____ (A) meter (B) ms (C) kg (D) Newton	D	U/K	**M**
21	The unit of coefficient of friction is _____ (A) Newton (B) kilogram (C) meter (D) none	D	U/A/K	**E**
22	Friction can be reduced by using ball bearings because they_____ (A) make the surface plane (B) make the surface greasy (C) convert sliding friction into rolling friction (D) have no friction of their own	C	U/A/K	**E**
23	If the force acting on a body is doubled, then the acceleration produced is _____ (A) 1/2 (B) 1/4 (C) double (D) quadrupled	C	U/K	**M**

No.	Question	Ans		
24	When a horse pulls a wagon, the force that causes the horse to move forward is the force. (A) he exerts on the wagon (B) the ground exerts on him (C) the wagon exerts on him (D) the wagon exerts on the ground	B	U/A/K	E
25	Which is the best approximation of the weight of an object of mass 800 gram? (A) 8N (B) 12 N (C) 9 N (D) 15 N	A	U/A/K	E
26	**The value of gravitational constant is determined by** A: Einstein B: Newton C: Cavendish D: None of them	C	U/K	**M**
27	**Tje acceleration due to gravity varies inversely with** A: Acceleration B: Velocity C: Attitude D: Mass	**C**	U/A/K	**E**
28	**The gravitational force b/w two bodies depends upon the product of thier masses and** A: Distance b/w them B: Shape of bodies C: Medium b/w them D: None of them	**A**	U/A/K	**E**
29	**The work will be positive ,of the angle between force and displacement is** A: 90 B: 180 C: 60 D: 0	**D**	U/K	**M**
31	**1Kw = _____ watts** A: 10 B: 100 C: 1000 D: 0.001	**C**	U/A/K	**E**

No	Question	Answer		
32	**Whenever work is done on an object, it gains** A: Force B: Power C: Sweat D: Energy	**D**	U/A/K	**E**
33	**The SI unit of enery is** A: Joule B: Metre C: Newton D: Time	**A**	U/K	**M**
34	**Power is the product of _____ and _____** A: Force B: Velocity C: Both D: None of them	**C**	U/A/K	**E**
35	**The work will be positive if the angle between force and displacement is _____** A: 90 Degree B: 180 Degree C: 0 Degree D: 30 Degree	**C**	U/A/K	**E**
36	**The energy stored in a stretched or compressed elastic material such as spring is called _____** A: Gravitational potential energy B: Elastic potential energy C: Kinetic energy D: All of them	**B**	U/K	**M**
37	**When a body is capable of doing work by virtue of its motion, the energy is called _____** A: Gravitational potential energy B: Elastic potential energy C: Kinetic energy D: None of these	**C**	U/A/K	**E**
38	**Elasticity of a substance depends on its _____** A: Temperature B: Size C: Nature D: Both (b) & (c)	**C**	U/A/K	**E**

39	**According to _____ "Tension is proportional to extension".** A: Pascal's Law B: Archimedes Principle C: Hook's Law D: None of these	**C**	U/K	**M**
40	**Formula of a pressure is _____** A: F = p/a B: P = F/A C: F=MA D: P = f/m	**B**	U/A/K	**E**
41	**In SI system unit of temperature is _____** A: Joule B: Kelvin C: Meter D: Kilometer	**B**	U/A/K	**E**
42	**The degree of hotness or coldness of a body is called _____** A: Heat B: Temperature C: Power D: Energy	**A**	U/K	**M**
43	**In SI system the unit of heat is _____** A: Newton B: Newton-meter C: Joule D: Pascal	**C**	U/A/K	**E**
44	All the universe follows the laws of: A) Nature B) Physics C) Newton D) Galileo	**B**	U/A/K	**E**
45	The Least count of Micrometer screw gauge is: A) 1 mm B) 0.1 mm C) 0.01mm D) 0.001 mm	**D**	U/K	**M**
46	The wheels of a moving car and the blades of a moving electric fan are the examples of : A) Linear motion B)Rotatory motion C) Translatory motion D) Vibratory motion	**B**	U/A/K	**E**

48	It is scalar A) Torque B) Distance C) Acceleration D) Momentum	**B**	U/A/K	**E**
49	1 radian = A) 57.3° B) 1° C) 5.73° D) 0.573 15.	**A**	U/K	**M**
50	The second condition of equilibrium states that : A) $\sum P = 0$ B) $\sum \tau = 0$ C) $\sum F = 0$ D) both $\sum P$ & $\sum F = 0$	**B**	U/A/K	**E**
51	Which is the best approximation of the weight of an object of mass 800 gram? A)88N B) 80N C) 8N D) 0.8N	**C**	U/A/K	**E**
52	An object appears lighter in water because one of the properties of matter: A) Pressure B) Buoyancy C) Surface Tension D) Viscosity	**C**	U/K	**M**
53	A 25 N Force acts on X-axis, what is value of Y-component A) 25 N B)5 N C) 0 N D)-25 N	**C**	U/A/K	**E**
54	The value of radius of earth is: A) 6.38×10-6 m B) 6.38×106 m C) 63.8×10-6 m D)63.8×106 m	**B**	U/A/K	**E**
55	If F=100N and v=2.5 m/s , then Power will be : A)25 watt B) 250 watt C)2.5 Kilowatt D) 250 Kilowatt	**B**	U/K	**M**
56	A body is said to be in motion if it changes its position with respect to its : A) Time B) Speed C) Velocity D) Surrounding	**D**	U/A/K	**E**
57	The S.I unit of force is : A) Kilogram B) watt C) Newton	**C**	U/A/K	**E**
58	5. If F=4N, a=2m/s2 , then " m" is A) 2 Kg B) 4 Kg C) 6 Kg D) 8 Kg	**D**	U/K	**M**
59	Boiling point of water at S.T.P is A) 0 K B) 273 K C) 100 K D) 373 K	**B**	U/A/K	**E**